

Amendments to the Specification:

Please amend the Specification in this application as follows:

Page 35, line 11 – page 36, line 7:

A model functionally-graded two layer system is fabricated. The first layer is CPC containing 30% mannitol to quickly create macropores for vascular ingrowth. The second layer is CPC containing absorbable meshes (Ethicon, NJ). The meshes will provide substantial strengthening while bone is growing into the first layer. After significant bone ingrowth into the first layer thus increasing the strength of the implant, the meshes dissolve to create highly-interconnected macropores to ensure further bone ingrowth into the entire implant. The specimen dimensions are 3 mm x 4 mm x 25 mm, with the first layer taking 0.5 mm and the second layer taking 2.5 mm. The paste of each layer is placed into the specimen mold sequentially, and the composite is self-hardened in a humidior. The control is the same CPC containing 30% mannitol with the same specimen dimensions. The properties of the specimens after one day immersion in a physiological solution are measured in standard three-point flexure and are listed in Table 3.